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PP28: Risk of onychomycosis in diabetic patients in Colombo South Teaching Hospital.

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INTRODUCTION: Onychomycosis accounts for about a half of all nail abnormalities. Approximately 33% patients with diabetes are suffering with onychomycosis. In Sri Lanka the prevalence of onychomycosis among diabetics is not well documented

OBJECTIVES: The study aimed to investigate the proportion of onychomycosis, etiology, risk factors and knowledge among diabetic patients presenting to a Colombo South Teaching Hospital.

METHODS: Descriptive cross sectional study. Three hundred patients attending the diabetic clinic at Colombo South Teaching Hospital were included. An interview based questionnaire was filled. Nail clippings were obtained from abnormal nails using standard protocol after obtaining informed written consent. Direct microscopy with 20% KOH, culture on Sabouraud's dextrose agar with and without antimicrobials and slide culture were used for species identification. Data were analyzed using SPSS 16.0 version. All inferential statistics were tested at $p < 0.05$.

RESULTS: Among the clinically suspected patients, 85% were mycologically confirmed to have onychomycosis. Aspergillus species were most commonly isolated (n=180, 71%) followed by dermatophytes, yeasts and other moulds (n=75, 29%). Of the patients having Aspergillus onychomycosis, 149 (83%) were in the >50 age group. In men Aspergillus onychomycosis was seen in 82%. Among the patients who had Aspergillus nail infection, 114 (63%) had diabetes for a period of >15 years. Among the patients who were engaged in agricultural activities, 77% were confirmed to have infected nails due to

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Aspergillus species. Among the study population 36% of patients assumed they had toenail infections but only 5% assumed that infections were caused by fungus.

CONCLUSIONS: Aspergillus niger was the commonest pathogen isolated from toenail infection. Risk factors associated with Aspergillus onychomycosis were age, gender, duration of diabetes, length of exposure to fungi and occupation.